

V. *On a collection of Lepidoptera from Kiukiang.* By
JOHN HENRY LEECH, B.A., F.L.S., F.Z.S.,
F.R.G.S., &c.

[Read December 5th, 1888.]

PLATES VII., VIII., & IX.

THE materials for this paper were collected for me during the months of April, May, June, and July, 1887, by Mr. A. E. Pratt, in the neighbourhood of Kiukiang (which is situated on the Yangzee River, about 500 miles from the sea). The collection is not rich in species, probably only representing about one-sixth part of the lepidopterous fauna; it contains, however, a fair proportion of new species, and also many that have not hitherto been recorded from that region. The larger proportion of species are common to the eastern coast of China, and Japan, but many occur also in the Himalayas. The chief point of interest in the collection is the variation exhibited in so many species, especially in *Papilio Sarpedon* and *Melanargia halimede*.

1. *Euplœa midamus*, Linn.; Kirby, Cat. Diurn. Lep.,
p. 15.

Two examples only.

2. *Lethe butleri*, n. s. (Pl. VIII., fig. 3).

Wings in both sexes smoky brown, with their margins traversed by a slender pale band intersected by a line somewhat darker than the ground colour.

Male. Outer third of primaries rather paler than rest of wing. One small ocellus near the tip. Towards the outer margin of secondaries are two or sometimes three ocelli, that nearest to the anal angle being the largest, and always having a white pupil, though this varies in size, and is scarcely visible in some specimens.

Female. Larger than the male. Outer third of primaries paler.

TRANS. ENT. SOC. LOND. 1889.—PART I. (MARCH.) H 2

Often there are two ocelli situated one below the other near the apex, and sometimes a third lower down towards the outer angle. Ocelli on secondaries vary from two to four in number, and are arranged along and parallel with the outer margin; the lower pair always the largest.

Under surface of both sexes pale greyish brown, with a pale band intersected by a dark wavy line, and bordered internally by a dark serrated line running parallel with the outer margins. Venation prominent. Outer third of primaries paler and separated by a dark brown wavy line. Discoidal cell divided by a dark line. Parallel to the outer margin are two, three, or four ocelli, that nearer the apex being much the largest.

The markings on the secondaries are a dark basal streak from costa to the submedian nervure; beyond this is another dark streak starting from the costa, and, after skirting ocellus at anterior angle, forms a deep elbow towards the outer margin, and then strikes off in an oblique direction towards the anal angle. Parallel with outer margin is a series of six ocelli, that near the costa being the largest and nearly twice the size of No. 5, the next largest. Nos. 4 and 6 are about equal, but the latter sometimes exhibits a tendency to gemination. The costal ocelli can be faintly seen on the upper surface.

Expanse, ♂ 58—62 mm., ♀ 68 mm.

3. *Lethe naias*, n. s. (Pl. VIII., fig. 4).

Male. Blackish brown, apical third slightly paler, a pale band intersected by a line of the ground colour on the outer margins of all the wings, but most distinct on the secondaries. Two faintly outlined ocelli near apex of primaries and five on secondaries; of these last the fourth and fifth are the most distinct, the white pupils and pale irides being well-marked. The others are very indistinct, and appear to be the ocelli of the under side showing through the wing.

Female. Similar to the male, but larger and a shade paler in colour. Fringes pale whitish brown.

Under surface: colour same as on the upper side in both sexes. Primaries: two ocelli near apex with white pupils and yellow irides well-developed, and on the outer margin are a greyish violet wavy line and one of pale brown, narrowly separated by the ground colour. Secondaries: a narrow transverse streak of greyish violet, edged internally with dark brown before the middle of the wing, and another of the same colour bordered externally with a darker shade of ground colour beyond the middle of wing. This,

starting from the anterior margin in the direction of inner margin, is suddenly diverted towards the outer margin, but after reaching the 2nd subcostal nervule it resumes its original course, and terminates at the anal angle. Six very distinct white-pupiled ocelli: of these No. 1 on the anterior margin and No. 5 are the largest, whilst that at the anal angle has two white pupils. Each ocellus is placed within a ring of greyish violet; on the outer margin lines similar to those on primaries. Fringes as above.

Expanse, ♂ 64 mm., ♀ 68 mm.

A common insect at Kiukiang.

4. *Lethe syrcis*, Hew., Ex. Butt., iv., *Deb.*, t. iii., figs. 13, 14; Oberth., Et. Ent., vi., t. vii., fig. 3.

I received a long series of this fine species.

5. *Neope? muirheadii*, Feld., Wien. Ent. Mon., vi., p. 28 (Jan., 1862).

? *Debis segonax*, Hew., Exot. Butt., iii., *Deb.*, t. i., fig. 5 (June, 1862).

Neope segonacia, Oberth., Et. Ent., vii., fig. 4.

Fairly common at Kiukiang, and is there a most variable insect.

6. *Melanargia halimede*, Mén., Schrenk's Reise, p. 37, t. iii., figs. 6, 7. Var. *meridionalis*, Feld., Wien. Ent. Mon., vi., p. 29 (1862). (Pl. VIII., figs. 5, 6).

"A *M. halimede amurensi* hæc varietas circa Ningpo proveniens colore differt fusco prædominante fasciisque albis idcirco angustioribus. Ad sectionem *M. lacheseos*, Hübn., egregia species pertinet."

As will be seen by Felder's remarks quoted above, it is expressly stated that the dark colouring predominates in var. *meridionalis*. This is invariably the case with specimens from Ningpo and Kiukiang, but not with those from Amurland or Corea. The majority of Ningpo examples are nearly, some entirely, black; the same applies to those from Kiukiang. Figs. 5 and 6 represent the palest and darkest examples selected from over 130 specimens from the last-named locality. Corean *halimede* are darker than Amurland examples, but from neither of these localities has anything dark enough for var.

meridionalis been received; the form usually known by this name is really only an intermediate between Felder's variety and the type, and such is Romanoff's fig. 10, pl. xvi., in 'Memoirs sur les lepidoptères.'

Herr Honrath ('Entomologische Nachrichten,' xiv., p. 161) describes a variety of *M. halimede* from Kiukiang, and there is little doubt the specimens he refers to were some of my duplicates. The form he refers to as *lugens* is an intermediate between the two examples I have figured.

7. *Palæonympha opalina*, Butl., Trans. Ent. Soc. Lond., 1871, p. 404; Lep. Exot., p. 86, pl. xxxiii., fig. 3.

Of this rare species I received a long series; it seems to be constant.

8. *Satyrus dryas*, Scop., Ent. Carn., p. 153 (1763).

Satyrus bipunctatus, Motsch., Et. Ent., ix., p. 29.

Var. *sibirica*, Staud., Cat., p. 29.

Judging from the number of specimens sent this must be one of the most abundant species in Central China.

9. *Mycalesis regalis*, n. s. (Pl. VIII., figs. 2 ♂, 2a, ♀).

Male. Ground colour of all the wings blackish brown with violet reflections. Primaries traversed by a broad lilac-blue fascia from the 1st subcostal nervule to the anal angle, its inner edge touching the discoidal cell.

Female. Has the male colouring, but the violet reflections are more subdued. Lilac-blue fascia much narrower and more curved. All the wings with more rounded outer margins.

Under side of both sexes chocolate. Outer margins of primaries broadly bluish grey, with a violet tinge, enclosing a row of five, sometimes six, small ocelli, beyond which is an angulated double line of the ground colour. Outer margin of secondaries bluish grey, intersected by a wavy line of the ground colour. A sub-marginal series of from five to seven ocelli with white pupils and reddish brown irides, of which the second, third, and seventh, counting from the anterior margin, are often very faint. Internal to the ocelli is a series of bluish grey crescents.

Head, thorax, and upper surface of abdomen black. Legs and under surface of abdomen dark chocolate. Antennæ black,

chequered with white beneath; tips and under side of club deep orange.

Expanse, ♂ 55—58 mm., ♀ 50—54 mm.

Except that the narrower blue fascia on primaries of the female resembles the same character in *Bicyclus iccius*, and that the general colour of the wings on upper surface is something like that of *Mycalesis martius*, Fabr., this insect is quite distinct from any known species, and appears to be without any close ally.

I received 18 specimens (12 males and 6 females).

10. *Mycalesis gotama*, Moore, Cat. Lep. E. I. C., i., p. 232 (1857); Trans. Ent. Soc. Lond., 1880, p. 157.

Seems fairly common, and does not vary.

11. *Mycalesis perdiccas*, Hew., Exot. Butt., iii., *Myc.*, t. iii., fig. 15 (1862).

Mycalesis sangaica, Butl., Ann. & Mag. Nat. Hist. (4), xix., p. 95.

Much commoner than *gotama*. It agrees well with the Japanese form.

12. *Ypthima motschulskyi*, Brem. & Grey, Schmett. Nordl. China, p. 8; Mén., Cat. Mus. Petr., i., t. vi., fig. 5.

I received upwards of a hundred specimens of this species, and these vary extremely both in size and markings, as also in number and disposition of ocelli.

13. *Ypthima sakra*, Moore, Cat. Lep. E. I. C., i., p. 286, No. 508 (1857); Hew., Trans. Ent. Soc. Lond. (3), ii., p. 290, t. 18, fig. 18 (1865).

Constant in markings and easily distinguished from *motschulskyi* by reference to the under surface, where there is a double ocellus at the outer angle of hind wings. The species does not appear to be common.

14. *Ypthima baldus*, Fab., Syst. Ent., 323 (1793).

Ypthima argus, Butl., Journ. Linn. Soc., Zool., ix., p. 55 (1866).

Y. zodia, Butl., Trans. Ent. Soc. Lond., 1871, p. 402.

Y. evanescens, Butl., Ann. & Mag. Nat. Hist. (5), vii., p. 134.

The specimens from Kiukiang show a remarkable amount of variation in the size of the ocelli on the under surface of the hind wings. All the forms enumerated above are represented together with the intermediate connecting-links.

15. *Acræa vesta*, Fabr., Mant. Ins., ii., p. 14 (1787); Don., Ins. China, t. 30, f. 1 (1799); Kirby, Cat. Diurn. Lep., p. 135.

Appears to be very common and exceedingly variable.

16. *Argynnis sagana*, Doubl., Gen., t. xxiv., fig. 1, ♂ (1850).

Damora paulina, Nordm. Bull. Mosc., 1851, iv., p. 440, t. xii., figs. 1, 2, ♀.

Very common, and does not differ in the least from Japanese specimens.

17. *Argynnis paphia*, Linn.

♀ var. *valesina*, Esp.

The specimens are rather larger than those from Europe, and the females are all of the *valesina* form, some, however, being darker than others.

18. *Argynnis laodice*, Pall., Reise, i., p. 470 (1771).

Var. *japonica*, Mén., Cat., ii., p. 152, t. x., fig. 3.

The specimens are of the *japonica* form, but larger. Appears to be plentiful at Kiukiang.

19. *Argynnis anadyomene*, Feld., Wien. Ent. Mon., vi., p. 25 (1862).

Argynnis ella, Brem., Lep. Ost.-Sib., p. 94, t. viii., fig. 1 (1864).

Very common at Kiukiang.

20. *Argynnis niphe*, Linn.

Common, and does not differ from Japanese specimens.

21. *Argynnis adippe*, Linn. ; P. Z. S., 1887, p. 42, 3,
No. 103.

I received a fine series of this species. The specimens are larger than any I have seen from other localities, but not so variable as those from Japan and Corea.

22. *Argynnis nerippe*, Feld., Wien. Ent. Mon., vi.,
p. 24 (1862).

Argynnis coreana, Butl., Ann. Mag. Nat. Hist. (5), ix.,
p. 15.

Appears to be commoner than *adippe* at Kiukiang.

23. *Melitæa* (?) *maculata*, Br. & Grey, Schmett. Nordl.
China, p. 7, t. i., fig. 3 (1853).

Argynnis leopardina, Lucas, Ann. Soc. Ent. de France,
1866, p. 221, t. iii., fig. 3.

I received four specimens of this interesting species from Kiukiang.

24. *Vanessa c-album*, Linn. ; P. Z. S., 1887, p. 420.

The Kiukiang form of this species is very large and pale, and seems to occur abundantly.

25. *Vanessa c-aureum*, Linn.

Vanessa angelica, Cram., Pap. Exot., iv., t. 388,
figs. α, η.

Appears to be a common insect.

26. *Vanessa charonia*, Drury, Exot. Ent., i., t. 15 (1773) ;
Brem., Lep. Ost.-Sib., p. 18.

Seems very common ; none of the specimens, however, approach the var. *glauconia*, Motsch.

This species does not seem to be as plentiful as the last at Kiukiang.

27. *Pyrameis indica*.

Papilio atalanta indica, Herbst.

Vanessa callirhoë, Fabr.

Some examples are very close to var. *vulcania*.

28. *Vanessa cardui*, Linn.

A few specimens of the usual type.

29. *Hestina assimilis*, Linn.

I received a long series of this fine species from Kiukiang.

30. *Limenitis sydyi*, Led., Verh. Zool. Bot. Ges., 1853, p. 357, t. i., fig. 3.

This species appears to be fairly constant at Kiukiang and there is no tendency to aberration in the direction of var. *latefasciata*, Mén.

31. *Limenitis helmanni*, Led., Verh. Zool. Bot. Ges., 1853, p. 356, t. i., fig. 4.

The specimens from Kiukiang are larger than those from Amurland, Corea, and Japan.

32. *Neptis aceris*, Lep., Reise, i., p. 203, t. xvii., figs. 5, 6.
Var. *intermedia*, Pryer.

Seems very common at Kiukiang, and agrees perfectly with the Japanese form.

33. *Neptis eurynome*, West. Don., Ins. China (2nd ed.), p. 66 (1842).

Papilio leucothoë, Don., Ins. Chin., t. 35, fig. 3 (1798).

This species also seems common at Kiukiang.

34. *Neptis pryeri*, Butl., Trans. Ent. Soc. Lond., 1871, p. 561; Lep. Exot., pl. 63, fig. 4; Jans., Cist. Ent., ii., p. 155.

Limenitis arboretorum, Oberth., Et. Ent., ii., p. 24, t. iii., fig. 3.

The Chinese specimens do not differ in the least from Japanese and Korean. The species appears to be very common at Kiukiang.

35. *Athyma sulpitia*, Cram., Pap. Exot., iii., t. 214, 1782.

Var. *ningpoana*, Feld., Wien. Ent. Mon., vi., p. 26.

A fairly long series of this species shows but little variation of importance; the two white dashes in the cell, however, are sometimes confluent.

36. *Athyma fortuna*, n. s. (Pl. VIII., figs. 1 ♂, 1 a, ♀).

Male. Upper surface smoky black, with a slight purplish reflection in certain lights. Primaries: discal streak club-shaped, entire; discal band represented by a series of nine white or opaline spots, of which the third, fourth, and fifth, as also the eighth and ninth, are only separated by the nerves. Two small spots and a faint curved linear mark at the outer angle are the only sub-marginal markings. Secondaries: a broad and almost straight central white or opaline band, interrupted only by the subcostal nervule, and on the hind margin a white or opaline bar tapering from the anal angle towards the costa, and intersected by the nervules forming a series of six spots.

Female. Upper surface brownish black. Discal streak terminates in a dot beyond the cell. Markings as in the male, but spots smaller and of a creamy tint. Fringes white, chequered with black at the extremities of the nervules.

Under surface of all the wings orange-brown. The discal area and a quadrate spot at anal angle of primaries black. White markings much as on upper surface, but more confluent, and the streak terminates in a sharp point just outside the cell. There is also a whitish line bounding the lower two-thirds of outer margin, and two small white spots, one above and the other directly below the discal streak. A series of black crescent-shaped marks commencing near the costa, and, skirting the external edges of apical spots, runs parallel with outer margin to black spot at anal angle. These marks are bordered externally with white. Markings on the secondaries as on the upper surface, but with the addition of a fairly broad basal streak, which is bluish grey in the male, but white in female, and bluish grey abdominal fold. Expanse, ♂ 74 mm. ♀ 84 mm.

This species is most nearly allied to *Athyma jina*, Moore, from which, however, it can easily be distinguished by the narrower discal streak, and by the absence of white abdominal belt. On the upper surface it also bears a superficial resemblance to *A. sulpitia*, Cram., but the character of the discal streak and the

markings of the under surface at once separate it from that species.

37. *Apatura ilia*, Schiff., S. V., p. 172.

Apatura here, Feld., Wien. Ent. Mon., vi., p. 27 (1862).

All the specimens received from Kiukiang belong to the form *here*, though individually they vary considerably. I have forms of var. *metis* from S. Russia, which agree very well with some of the Chinese specimens.

38. *Apatura subalba*, Pouj, Ann. Soc. Ent. Fr., 1885, p. ccvii.

Only five examples of this magnificent species were sent me. The type, which is rather smaller and a very bad specimen, is in the Paris Museum, and was taken by the Abbé David in Thibet.

39. *Charaxes narcæus*, Hew., Exot. Butt., i., *Nymph.*, t. 1, figs. 1, 4 (1854).

Var. *mandarinus*, Feld., Reise Nov. Lep., iii., p. 437, n. 710 (1867).

Both type and variety of this fine species seem to be common at Kiukiang.

40. *Polyommatus phlœas*, Linn.

Var. *chinensis*, Feld., Verh. Zool. Bot. Ges. Wien., xii., 488 (1862).

Var. *eleus*, Fab.

Both varieties appear to be common at Kiukiang.

41. *Lycæna argiades*, Pall.; Proc. Zool. Soc., 1887, p. 415.

Kiukiang representatives of this species vary greatly both in size and colour.

42. *Lycæna fischeri*, Eversm., Bull. M., 1843, iii., 537; H.-S., 218, 9.

Lycæna davidi, Pouj., Ann. Soc. Fr., 1884, p. cxxxv.
L. filicaudis, Pryer.

A few specimens, which do not differ from those taken by me at Ningpo and Corea.

43. *Lycæna argia*, Mén., Cat. Mus. Petr., ii., p. 125,
t. x., fig. 7 ; P. Z. S., 1887, p. 415.

Lycæna opalina, Pouj., Ann. Soc. Ent. Fr., 1885, cxliii.
Agrees well with Japanese specimens.

44. *Lycæna argiolus*, Linn.

Lycæna ladonides, de l'Orza, Lép. Jap., p. 20.

L. levetti, Butl., Ann. & Mag. Nat. Hist. (5), xi., p. 111.

Seems fairly common at Kiukiang.

45. *Lycæna moorei*, n. s. (Pl. VII., fig. 4).

Male. Upper surface: all the wings smoky black. Fringes of primaries dusky, rather paler at anal angle; those of the secondaries white, with some darker scales at the extremities of the nervules, giving a slight chequered appearance. Under surface pale grey. Primaries with an elongated discoidal and a central series of six black spots; the last is linear, and all are surrounded with whitish. On the outer margin is a series of black marks more or less V-like in shape; these are bordered on each side with whitish, and precede a black line interrupted by the nervules. Secondaries: three basal spots, that on the anterior margin being large and somewhat triangular in shape, whilst the third is dot-like, and situated on the extreme edge of abdominal fold; an elongated discoidal and a central series of seven spots, the initial one being large and almost round, third and sixth oval,—these, as also one between the discoidal and first spot of central series, are black. A submarginal series of V-shaped black marks, a row of marks, chiefly small and linear, but including one large round spot, edged internally with orange, between the submedian nervure and first median nervule. Fringes grey, with a black line at their base.

Female. Same as male in colour and arrangement of markings, but spots on under surface are larger, especially those of central series on secondaries.

Expanse, 29 mm.

Though not closely allied to any known species, this insect has a superficial resemblance to *Lycæna fischeri*, Ev., but the absence of any caudal appendage at once separates it from that species. The arrangement of spots on under surface is also very different. From *Meletus hamada*, Druce, which it agrees with on the upper surface, it may be distinguished by the very

different under side maculation and the less chequered fringes.

Only three examples (two males, one female) were received from Kiukiang, but these show sundry modifications in size and shape of the spots, and in one specimen the spot between the discoidal and costal is only present on the right secondary.

46. *Niphanda fusca*.

Thecla fusca, Brem. & Grey, Schmett. Nordl. China's, p. 9 (1853); Proc. Zool. Soc., 1887, 410, n. 31.

Seems common at Kiukiang.

47. *Thecla w-album*, var. *eximia*, Fixsn.

Kiukiang specimens agree well with the type of Fixsen's *eximia*, which is in the collection of the Grand Duke Nicholas. That insect, however, has nothing whatever to do with *T. w-album*, and is either a distinct species or *T. grandis*, Feld. Felder's description seems to apply to my insect, but as I have not seen an example of *T. grandis*, and as there is no figure available for comparison, I am unable to say positively whether it is referable to that species or not.

48. *Thecla micans*, Brem. & Grey, Schmett. N. China's, p. 9 (1853).

Thecla betuloides, Blanch., Compt. Rend., lxxii., p. 810 (1871).

Three or four specimens taken in May or June.

49. *Thecla pratti*, n. s. (Pl. VII., fig. 4).

Male. Primaries black, with violet reflections over the discal area. Secondaries black, with the exception of a violet suffusion, bounded by two imaginary lines drawn from the base of wing, and terminating respectively at the anal angle and the extremity of the first subcostal nervule. Tails black tipped with white; anal lunule red. Fringes of all the wings pale, but becoming darker towards the apex of primaries.

Female. Uniformly smoky black. Anal lunule reddish orange,

bordered on its inner margin by a few bluish scales. Fringes of all the wings white, merging into black at the apex of primaries.

Under side: all the wings whitish grey. Primaries with a short darker transverse bar at the end of discal cell, beyond which is a darker broken band running from the costa towards the inner margin. Secondaries with two small dark spots near the base of wing, and a short darkish discal bar; beyond this is an irregular arrangement of darkish markings. Above the tail is a small black spot surrounded with yellow, a slender streak of which colour runs parallel with the hind margin to the black anal lunule, and then, turning at a right angle, traverses a third of the abdominal fold.

Expanse, 32 mm.

This species is variable on the under side both in shade of colour and in the intensity of the markings. In these respects four of the six specimens I received from Kiukiang differ somewhat from the examples described above. The anal lunule on upper surface of secondaries is also subject to variation, as in one example it is pale yellow, and in another bluish.

I took a few specimens of this insect at Foochau in April, 1886.

50. *Curetis acuta*, Moore, Ann. & Mag. Nat. Hist. (4),
xx., p. 50.

Occurs in July, and cannot be distinguished from Japanese specimens.

51. *Amblypodia rama*, Koll., Hug. Kaschm., iv., 2, p. 412,
t. 4, figs. 1, 2 (1848); Hew., Cat. Lyc. B. M.,
vii., fig. 72 (1862).

Amblypodia querceti, Moore, Cat. Lep. E. I. C., i.,
p. 43, n. 64 (1857).

♀ *A. dodonæa*, Moore, l. c., n. 65, t. i. a, fig. 8 (1857).

Seems to be fairly plentiful in July.

52. *Amblypodia avidiena*, Hew., Ent. Mo. Mag., 1877,
p. 108.

I only received one example of this interesting species.

53. *Terias læta*, Boisd., Sp. Gén., i., p. 674.

Var. *jægeri*, Mén., Cat. Mus. Petr., p. 84, t. ii., fig. 1 (1855).

Terias subfervens, Butl., Ann. & Mag. Nat. Hist. (5), xi., p. 278 (1883).

A few hybernated specimens, which do not show any material difference from Japanese specimens.

54. *Terias hecabe*, Linn.; P. Z. S., 1887, p. 409, n. 26.

As plentiful and as variable at Kiukiang as in Japan. Series includes most of the named forms.

55. *Terias bethesba*, Janson, Cist. Ent., ii., p. 272 (1878).

Two specimens (male and female) taken in July. I believe this species has not been previously recorded from China.

56. *Pieris rapæ*, Linn.

Pieris crucivora, Boisd., Sp. Gén., i., p. 522 (1836).

Var. *orientalis*, Oberth., Et. Ent., v., p. 13 (1880).

The specimens I received from Kiukiang are very variable, and this is especially noticeable in the males. These usually have one or two spots on the fore wing, but in some examples the disc of the wing is immaculate. The apical patch of fore wing may be either very faintly indicated or strongly developed.

57. *Pieris canidia*, Sparrm.

Pieris gliciria, Cram., Pap. Exot., ii., t. 171, fig. E, F.

P. clavipennis, Butl., Ann. & Mag. Nat. Hist. (4), xix., p. 96.

P. sordida, Butl.

Black spots on fore wing two or one, sometimes entirely absent. This species seems to be common at Kiukiang.

58. *Pieris napi*, Linn.

Var. *melete*, Mén., Cat. Mus. Petr., ii., p. 113, t. x., figs. 1, 2 (1855); P. Z. S., 1887, p. 407, n. 16.

The examples of this species from Kiukiang are larger and the markings more distinct than in any

specimens I have from Japan. Compared with female *napi* from other localities, the under side of hind wings are of a richer and much deeper yellow. Marking and shape of wing variable.

59. *Callidryas crocale*, Cram., Pap. Exot., i., t. 55,
figs. c, d.

Callidryas jugurtha, Cram., op. c., ii. t. 187, figs. e, f.
Only one example.

60. *Rhodocera rhamni*, Linn.

Rhodocera nipalensis, Doubl., Gen. Diurn. Lep., p. 71
(1847).

R. maxima, Butl., Trans. Ent. Soc. Lond., 1885,
p. 407.

Specimens from Kiukiang are larger and deeper coloured than any others with which I am acquainted.

Rhodocera acuminata, Feld. (Wien. Ent. Mon., vi., p. 23, 1862), also occurs at Kiukiang. I am unable to form an opinion as to whether it is a variety of *R. rhamni* or a distinct species. The females are very easily distinguished, but I have some males which appear to be intermediate between *acuminata* and *rhamni*.

61. *Colias hyale*, Linn.; P. Z. S., 1887, p. 408, n. 23.

Seems common, and is as variable as in Japan. The yellow form of the female appears to predominate.

62. *Sericinus telamon*, Don., Ins. China, t. xxvii., fig. 1
(1798); P. Z. S., 1887, 404, n. 12.

Seems common at Kiukiang. I have received over one hundred specimens, among which are individuals corresponding in every particular with the named forms, and also intermediates linking one form with another.

63. *Papilio elwesi*, n. s. (Pl. VII., fig. 1).

Male. Ground colour of all the wings black. Primaries and anterior portion of secondaries thickly sprinkled with whitish scales on each side of the nervures and nervules, which gives the insect a grey and streaked appearance. Posterior portion of

secondaries black with a bluish tinge, ornamented with five deep red crescent-shaped marks and an ocellus; the latter is bordered with white on its external edge, and is situated at the anal angle. Along the outer margin are four small red marks, bordered externally with white, that situated between the extremities of the first and second median nervules being much the largest. Under surface; colour, and ornamentation similar to these characters on the upper side, but somewhat fainter. Head, thorax, and legs black. Body bluish black.

Expanse, 156 mm.

This species can at once be separated from any other known *Papilio* by its broad spatulated tails, which are traversed to their margins by *two* (the 2nd and 3rd median) nervules. (Pl. VII., fig. 1 a).

I only received two examples of this interesting species.

64. *Papilio aristolochie*, Fabr., Syst. Ent., p. 443 (1775).

Appears to be very common at Kiukiang. Extremely variable in marking, especially as regards the spots on hind wings, which may be either 2, 3, 4, or 5 in number. One female example has five of these spots on one hind wing, and none on the opposite one.

65. *Papilio pamnon*, Linn.

Var. *borealis*, Feld., Wein. Ent. Mon., vi., p. 22 (1862).

This does not appear to be a common species at Kiukiang. The specimens are larger than those I have from Foochau and Hongkong, and the female has much more red on the hind wings. The females from Kiukiang (four in number) vary exceedingly.

66. *Papilio bianor*, Cram., Pap. Exot., ii., t. 103, fig. c (1779); Lep. Jap. & Cor., P. Z. S., 1887, 404.

Appears fairly plentiful. The spring form, which closely resembles the var. *japonica*, Butl., seems rarer than the summer form. Over a hundred examples were received from Kiukiang, and no two of these are alike; the variation is greater than obtained among the specimens from Japan.

67. *Papilio demetrius*, Cram., Pap. Exot., iv., t. 385, figs. E, F (1882).

Var. *carpenteri*, Butl., Ann. Mag. Nat. Hist. (5), x., p. 318.

A single male specimen taken in June.

68. *Papilio alcinous*, Klug, Neue Schmett., t. i. (1836).

Papilio alcinous, var., Gray, Cat. Lep. Ins., pl. iv., figs. 2, 3.

*P. menci*us, Feld., Wien. Ent. Mon., vi., p. 22 (1862).

P. spathatus, Butl., Ann. & Mag. Nat. Hist. (5), vii., p. 139.

P. plutonius, Oberth., Et. Ent., ii., p. 16, t. iii., fig. 2 (1876).

After comparing hundreds of specimens from China and Japan, I am unable to find sufficient differences to separate the above forms. M. Oberthur, Et. Ent., ii., p. 16, mentions the shape and length of tails, shape of hind wings, and red spots as characters by which the forms may be distinguished. In an extensive series of specimens, however, such as that before me, it is seen that all these characters are subject to considerable modification, so that it is not possible to place reliance upon them.

69. *Papilio sarpedon*, L., var. (Pl. VII., fig. 2).

The variety figured is the common form of *P. sarpedon* at Kiukiang, and differs from the type in being without the band-like series of blue spots on secondaries. Other examples are intermediate,* and connect the variety with the type. Ningpo and Ichang specimens exhibit no tendency whatever to vary in the direction of this form.

70. *Papilio xuthus*, Linn.

Var. *xuthulus*, Brem., Lep. Ost.-Sib., p. 4, t. i., fig. 2.

Both forms, as well as intermediates, occur commonly.

* One of these has been named var. *semifasciatus* by Herr Honrath, Entom. Nachr., xiv., p. 161 (June, 1888).

71. *Papilio machaon*, Linn.

Var. *asiatica*, Mén., Enum., i., p. 70 (1855).

Var. *hippocrates*, Feld, Verh. Zool.-bot. Ges. Wien., xiv., p. 314.

All the specimens received from Kiukiang belong to the forms *asiatica* and *hippocrates*; they are extremely variable both as regards size, colour, and markings.

72. *Papilio macilentus*, Janson, Cist. Ent., ii., p. 158.

Papilio tractipennis, Butl., Ann. & Mag. Nat. Hist. (5), vii., p. 139.

P. scævola, Oberth., Et. Ent., iv., p. 37.

I received six specimens of this species, only one of which was of the female sex. It does not differ in any way from the Japanese form.

73. *Ismene badra*, Moore, Cat. Lep. E. I. C., i., p. 245 (1865).

One specimen, which agrees well with N. Indian examples of this species, except as regards the anal angle of hind wing, which in *badra* is rather more produced.

74. *Pamphila mathias*, Fabr., Ent. Syst., Suppl., 433 (1798).

Only three specimens of this species were sent me.

75. *Pamphila oceia*, Hew., Desc. Hesp., p. 31, n. 22 (1868).

Six or eight specimens, all agreeing with those bearing this name in Mr. Moore's collection.

76. *Pamphila guttata*, Murr., P. Z. S., 1881, p. 912.

Eudamus guttatus, Brem. & Grey, Schmett. Nordl. China's, p. 10 (1855).

Goniloba guttata, Mén., Cat. Mus. Petr., i., t. v., fig. 4 (1857).

Seems to be rare at Kiukiang.

77. *Pamphila fortunei*, Feld., Reise Nov., t. 72, fig. 11.

One specimen only.

This is probably a form of *pellucida*, Murray, but I can form no definite opinion without a longer series.

78. *Pamphila prominens*, Moore.

Gegenes sinensis, Mab., Bull. Soc. Zool. Fr., 1877, p. 231.

In the Hewitson collection, amongst insects named *mohopaani*, Wall., is a specimen agreeing well with my Chinese examples. The specimen referred to bears two tickets of locality, one N. India and the other W. Nile; the former is probably the correct one.

I received eight or ten specimens from Kiukiang.

79. *Pamphila mencia*, Moore, Ann. & Mag. Nat. Hist. (4), xx., p. 52.

Four examples.

80. *Gegenes hainanus*, Moore, P. Z. S., 1878, p. 703.

Two specimens received, which agree well with Mr. Moore's type.

81. *Hesperia sylvatica*, Brem., Lep. Ost.-Sib., p. 34, t. iii., fig. 10.

Appears to be common at Kiukiang.

The specimens are somewhat darker than those from Japan, but none approach the form *leonina*, Butl.

82. *Syricthus maculatus*, Brem. & Grey, Schmett. Nordl. China's, p. 11.

A few examples only. They differ in no way from Japanese specimens.

83. *Plesioneura bifasciata*.

Eudamas bifasciatus, Brem. & Grey, Schmett. N. China's, p. 10 (1853).

Gonilobia bifasciata, Mén., Cat. Mus. Petr., Lep., i., t. v., fig. 3 (1855).

This seems to be a scarce insect at Kiukiang. The

specimens do not differ from those which I took at Ningpo and in the Corea.

84. *Tagiades nymphealis*, Speyer, Stett. Ent. Zeit., 1879, p. 348.

About ten fine specimens of this large Hesperid, which appears to be closely allied to *Satarupa gopala*, Moore, from Sikkim.

85. *Pterygospidea maculosa*, Feld., Reise Nov., p. 528, t. 73, n. 7 (1867).

A large number of very fine specimens of this beautiful species.

86. *Pterygospidea sinica*, Feld., Wien. Ent. Mon., vi., p. 30 (1862).

Pterygospidea moorei, Mab., Bull. Soc. Ent. France (5), vi., p. clii. (1876).

Daimio felderi, Butl., Ann. & Mag. Nat. Hist. (4), vii., p. 140.

Appears to be common at Kiukiang.

87. *Pterygospidea davidii*, Mab., Bull. Soc. Ent. France (5), vi., p. 54 (1876).

A nice series.

88. *Antigonus vasava*, Moore, P. Z. S., 1865, p. 786.

A fine series, showing some slight differences in the hyaline maculation of secondaries and towards base of primaries. Agree well with specimens from Ningpo.

89. *Acherontia atropos*, Linn.

Acherontia styx, Westw., Cab. Orient. Ent., 88, pl. 42, fig. 3.

A. medusa, Butl., Trans. Zool. Soc., ix., 597 (1876); Ill. Typ. Lep. Het., pt. iii., p. 3, pl. xli., fig. 5.

Five specimens, all of which agree with Japanese examples in my collection. Absence of black bands on the under surface of abdomen, by which it is claimed *medusa* and *styx* may be separated from *Atropos*, is not

a trustworthy character, as in some European specimens these bands are not present on the ventral surface, whilst some Chinese and Japanese examples exhibit distinct traces of such bands.

90. *Acherontia morta*. Hübn., Verz. Schmett., 140, 1496.

Acherontia atropos, var., Cram., Pap. Exot., iii., 74,
pl. 237, fig. A.

A. lethe, Westw., Cab. Orient. Ent., 87, pl. 42, fig. 2.

A. satanas, Boisd., Hist. Nat. Lep., pl. xvi., fig. 1.

Only one specimen, agreeing exactly with example from Punjaub in my collection, taken by me at Murree.

91. *Smerinthus ocellatus*, Linn.

Smerinthus planus, Walk., Cat. Lep. Het., viii., 254
(N. China).

S. argus, Mén., Cat. Mus. Petr., p. 94, No. 1561.

Two specimens.

92. *Smerinthus dissimilis*, Brem., Lep. Ost.-Sib., p. 35,
t. iii., fig. 12.

One example, much more rosy than specimens from Amurland.

93. *Ampelophaga rubiginosa*, Brem. und Grey, Beitr. zur
Schmett. Faun. Nord. China, p. 52.

Appears to be fairly common at Kiukiang.

94. *Clanis bilineata*, Walk., Cat. Lep. Het., Suppl., v.,
1857 (1866); Butl., Ill. Typ. Lep. Het., pt. v.,
14, pl. lxxxi., fig. 4 (1881).

Only one example.

95. *Acosmeryx anceus*, Cram., Pap. Exot., iv., 124,
pl. 355, fig. A.

One example only.

96. *Daphnusa colligata*, Walk., Cat. Lep. Het., viii.,
238 (1856).

Metagastes bieti, Oberth., Lep. du Thibet, p. 29, pl. i.,
fig. 2 (1886).

A single specimen.

97. *Lophura sangaica*, Butl., P. Z. S., 1875, p. 621.

One example only.

98. *Diludia increta*, Walk., Cat. Lep. Het., Suppl., i., p. 36 (1864); Butl., Ill. Typ. Lep. Het., pt. iii., pl. xli., fig. 7 (1879).

Two examples differing greatly in size, as also in colour of hind wings.

99. *Chærocampa japonica*, Boisd., Ins. Lep. Het., i., 241.

One example.

100. *Chærocampa silhetensis*, Walk., Cat. Lep. Het., viii., p. 143 (1856); Butl., Ill. Typ. Lep. Het., pt. v., p. 8, pl. lxxix., fig. 6.

Chærocampa bisecta, Moore, cf. Butl., l. c.

One example.

101. *Chærocampa elpenor*, Linn.

Chærocampa lewisii, Butl., Proc. Zool. Soc., 1875, p. 247.

Several specimens from Kiukiang.

Except that it is more rosy on hind margin of anterior wings, *lewisii*, Butl., is not separable from typical *C. elpenor*. Some European examples of *C. elpenor* in my collection are quite as rosy as *lewisii*.

102. *Pergesa mongoliana*, Butl., Proc. Zool. Soc., p. 622 (1875); Ill. Typ. Lep. Het., pt. ii., p. 2, pl. xxi., fig. 5.

Four specimens differing in size and markings.

103. *Leucophlebia lineata*, Westw., Cab. Orient. Ent., p. 46, pl. xxii., fig. 2.

One specimen.

104. *Macroglossa pyrrhosticta*, Butl., Proc. Zool. Soc., 1875, 242, pl. xxxvi., fig. 8.

Several specimens. Variable.

105. *Macroglossa bombylans*, Boisd., Ins. Lep. Het., i., 331 (1874).

Two specimens.

106. *Sataspes infernalis*, Westw., Cab. Or. Ent., p. 61,
pl. 30, fig. 3 (1848).

One male example without the typical blue markings, but with the basal half of all the wings blackish, and some patches of bluish-grey scales, especially near the thorax.

107. *Hemaris radians*, Walk., Cat. Lep. Het., viii., 84 ;
Butl., Ill. Typ. Lep. Het., pt. ii., p. 1, pl. xxi., fig. 2.

One specimen.

108. *Sciapteron chinense*, n. s. (Pl. VII., fig. 5).

Primaries purplish black, with a few brownish scales scattered over the centre and on hind margin of the wing, and a small patch of yellow scales at the base. Secondaries hyaline, slightly smoky towards the margins; fringes and neuration black, as also are the head, thorax, and abdomen, but the latter is encircled by three orange bands of uniform width at equal distances apart. Collar yellow, pectus marked with orange. Antennæ black, slightly pectinated in the male. Legs black, tarsi of anterior pair paler.

Expanse, ♂ 30 mm., ♀ 39 mm.

This species may be distinguished from *Sciapteron regale*, Butl., by its much longer and more slender body, by the absence of orange markings on head and thorax, and by the equal size and greater width of the abdominal bands. From *S. euprealis*, Moore, it may be separated by the position of the bands, which in that species are situated one near the junction with thorax, and other two towards apex of body.

Two specimens, male and female, taken near Kiukiang in June.

HYPERTHYRUS, n. g.

Palpi projecting beyond the head, 2nd joint densely clothed with hair, 3rd joint, which is one-fourth the length of 2nd, barely scaled. Antennæ filiform. Abdomen tapering sharply posteriorly. Costa of primaries straight to apex, which is slightly curved, the outer margin twice indented at angle. Secondaries half the length of primaries, outer margin indented.

Something of the appearance of *Thyris*, but differing in its much more elongate primaries. Type, *Hyperthyris aperta*.

109. *Hyperthyrus aperta*, n. s. (Pl. VII., fig. 7).

Primaries hyaline, golden brown at base, and with a triangle on costa, submarginal band and the veins blackish; outer margin fuscous tinged with golden brown, and sparsely scaled. Secondaries hyaline, costa and wide outer border blackish; abdominal margin blackish, with some patches of golden brown scales. Head and thorax golden brown marked with fuscous, collar blackish. Abdomen fuscous.

Expanse, 28 mm.

One example only of this curious species.

110. *Eusemia japana*.

Chelonomorpha japana, Motsch., Etud. Ent., 1860, p. 30.

Eusemia villicoides, Butl., Ann. & Mag. Nat. Hist. (4), xv., p. 141, pl. xiii., fig. 2 (1875).

Only one example; this differs from Japanese specimens in the smaller size of the cream-coloured spots on fore wings.

111. *Scudyra subflava*, Moore, Ann. & Mag. Nat. Hist., 1877, p. 85.

One specimen only.

112. *Retina costata*, Walk., Cat. Lep. Het., ii., 439, n. 2 (1854); Butl., Ill. Typ. Lep. Het., iii., p. 9, pl. xliii., fig. 7 (1879).

Five specimens. Walker notes the species from N. China.

113. *Eterusia ædea*, Clerck, Icon., pl. 4, fig. 2.

Seems common at Kiukiang, and exhibits but little disposition to vary.

114. *Soritia elizabetha*, Walk., Cat. Lep. Het., ii., 433.

One example only.

115. *Histia flabellicornis*, Fabr., Sp. Ins., ii., 163, 32; Walk., Cat. Lep. Het., ii., 412 (1854).

One example, smaller in size than Indian specimens, and with less blue on the wings.

116. *Epicopeia mencia*, Moore, Proc. Zool. Soc., 1874,
p. 578, pl. lxvii., fig. 8.

Two specimens, male and female.

117. *Arachotia hyalina*, n. s. (Pl. VII., fig. 6).

Male. Primaries black, with four hyaline spots before and six others beyond the middle. Secondaries hyaline with black borders, narrow on the abdominal fold, but broad on other margins; the border on outer margin projects inwardly as far as lower edge of discoidal cell. Fringes black, except at apices of all the wings, where they are white. Head and thorax bluish black, Abdomen greenish black, collar and segmental divisions marked with white. Antennæ deeply pectinated, steel-blue, whitish towards the tips, which are black. Under surface same as above, with the addition, on secondaries, of a small white dash on the anterior margin, and an oblong spot near the costa and beyond the middle. Legs black.

Expanse, 42 mm.

One very fine example.

118. *Phauda fortunii*, H.-S., Lep. Exot. Sp. Nov., Sér 1,
fig. 223.

Phauda triadum, Walk., Cat. Lep. Het., i., 257.

Two examples.

119. *Syntomis muirheadii*, Feld., Wien., Ent. Mon.,
vi., 37.

An interesting series of specimens, showing some variation in the number and size of hyaline spots on secondaries and towards apex of primaries.

120. *Syntomis Pratti*, n. s. (Pl. IX., fig. 3).

Allied to *Syntomis muirheadii*, Feld., to which species it bears a strong superficial resemblance, but is separated therefrom by having only two hyaline spots towards base of primaries, and blackish margins to abdominal fold of secondaries. There is no yellow patch on the posterior edge of thorax, but one is situated band-like on first segment of abdomen, and this is followed by five yellow belts in the male and four in female. These last are interrupted on the back of the female by a stripe of the blackish ground colour. Antennæ strongly pectinated in the male, a character which at once distinguishes it from male *S. muirheadii*.

Expanse, ♂ 47 mm., ♀ 56 mm.

Two specimens, male and female.

121. *Syntomis pascus*, n. s. (Pl. IX., fig. 1).

Closely allied to *Syntomis acrospila*, Feld., but wants the large white apical spot of that species; the hyaline spots of primaries are rather differently arranged, and that of the secondaries different in shape. Felder's figure* represents a male with five yellow belts on abdomen, but the male of *S. pascus* has six abdominal rings, and the female five.

Expanse, ♂ 45 mm., ♀ 52 mm.

Three specimens of each sex were received from Kiukiang.

122. *Syntomis thelebus*, Fabr.

Syntomis germana, Feld., Wein. Ent. Mon., vi., 37 (1862).

S. mandarinia, Butl., J. L. S., Zool., xii., 349.

In size of hyaline spots and confluency of abdominal bands this species varies greatly.

123. *Syntomis torquatus*, n. s. (Pl. IX., fig. 2).

In colour of wings, number, shape, and arrangement of hyaline spots this insect is not separable from *S. fortunii*, Boisd., but the yellow collar, five broad and two narrow abdominal bands, together with a small white patch in apical fringes of primaries, most clearly defined on under surface, at once show it to be distinct from that species.

Expanse, 34 mm.

One example.

124. *Alpenus flammeolus*, Moore, Ann. & Mag. Nat. Hist. (4), xx., 89.

A single example (female), which does not differ in the least from Japanese and Ningpo specimens.

125. *Rhodogastria lactinea*, Cram., Pap. Exot., ii., pl. cxxxiii., fig. D.

Rhodogastria sanguinolenta, Fab., Ent. Syst., iii., 473, 206.

One female of this variable species.

126. *Dionychopus niveus*, Mén., Bull. Phys. Petersb.,
iii., 108.

One male, smaller than my Japanese examples.

127. *Rhyparioides rubescens*, Walk., Cat. Lep. Het.,
iii., p. 677.

Var. *amurensis*, Brem., Lep. Ost.-Sib., p. 39, tab. iii.,
fig. 16 (1864).

Appears to be pretty common at Kiukiang.

128. *Diacrisia subraria*, Walk., Cat. Lep. Het., iii.,
p. 637, n. 2 (1855); Butl., Ill. Typ. Lep. Het., ii.,
p. 5, pl. xxiii., fig. 3 (1878).

Only one specimen from Kiukiang. I have a long
series from Ningpo, taken by a native collector.

129. *Cystidia stratonice*, Cram., Pap. Exot., iv., 234,
pl. 398, fig. κ.

Vithora agrionides, Butl., Ann. & Mag. Nat. Hist. (4),
xv., p. 137 (1875); Ill. Typ. Lep. Het., pt. ii.,
p. 3, pl. xxii., fig. 3.

Two examples taken in June.

130. *Hypercompa principalis*, Kollar, var. *regalis*.
(Pl. IX., fig. 4).

Kiukiang specimens differ from the type in the much
darker ground colour of primaries, and the spots on
primaries and ground colour of secondaries are deep
orange instead of pale yellow; the proportion of black
in these last is also much greater, and the abdomen is
heavily marked with black down the centre.

Among over a hundred specimens of *H. principalis*,
which I took last year in the N.W. Himalayas, not one
individual exhibited any trace of aberration in the
direction of the Kiukiang form.

131. *Trypheromera plagifera*, Walk., Cat. Lep. Het., ii.,
p. 400 (1854).

Several specimens.

132. *Bizone sanguinea*, Brem., Schmett. Nordl. China's, p. 14, tab. vi., fig. 4.

Five specimens.

133. *Bizone hamata*, Walk., Cat. Lep. Het., ii., p. 549.

Six specimens.

134. *Bizone phædra*, n. s. (Pl. IX., fig. 6).

Female. Primaries white, a band near the base united—on the costa, along the median nervure, and on the inner margin—to another placed before the middle of the wing; three black spots on the disk forming a triangle, and beyond these a broad angulated band; all these bands, together with one on the outer margin, which is deeply indented internally, are pale brick-red. Secondaries pale pinkish, with a fuscous discoidal spot. Fringes white. Under side pale pinkish, disk of primaries and central spot on secondaries fuscous. Head and thorax white, collar and tegulæ pinkish. Abdomen white, with some lateral tufts of pinkish scales.

Expanse, 46 mm.

Closely allied to *B. sanguinea*, Brem., but larger, and the markings are different. Only a female specimen was received from Kiukiang, but I have a male taken at Ningpo. The sexes are alike in colour and markings.

135. *Hypoprepia delineata*, Walk., Cat. Lep. Het., ii., p. 487 (1854).

Only one example.

136. *Digama abietis*, n. s. (Pl. IX., fig. 5).

Male. Primaries ashy grey, ornamented with black spots arranged in irregular transverse lines. Secondaries and abdomen pale orange. Head and thorax ashy grey, the latter spotted with black. Under surface of primaries and thorax sooty black; secondaries and abdomen as above. Legs sooty black.

Female rather larger, but in all other respects same as male.

Expanse, ♂ 26 mm., ♀ 34 mm.

This species is closely allied to *D. hearsayana*, Moore, but the colour of primaries is different, and the black spots are more numerous and larger; the abdomen is unspotted, and there is no discal spot on the under surface of secondaries.

I have received but one example (male) from Kiukiang. In April, 1886, I found *D. abietis* in the Snowy Valley, near Ningpo, fairly plentiful at rest on the trunks of fir-trees, from which they darted quickly when approached. They flew wildly from tree to tree, and were difficult to capture.

137. *Eligma narcissus*, Cram., Pap. Exot., i., 116,
pl. 73, figs. E, F.

One specimen.

138. *Lithosia vetusta*, Walk., Cat. Lep. Het., ii., p. 508
(1854).

Eight specimens, agreeing well with examples in my collection from Corea.

139. *Numenes disparilis*, Staud., Rom. Mem. sur les
Lep., Tome iii., p. 200.

One female example.

140. *Laria l-nigrum*, Muller, Faun. Fr., p. 40.

Kiukiang specimens have the \perp or \vee mark on the upper surface of the primaries replaced by a small round dot, but agree in every other respect with the typical form.

141. *Porthetria dispar*, Linn.

Liparis dispar var. *japonica*, Motsch., Etud. Ent.,
1860, p. 31.

Porthetria umbrosa, Butl., Trans. Ent. Soc. Lond.,
1881, p. 10.

P. hadina, Butl., l. c.

Kiukiang specimens come between *hadina*, Butl., and *japonica*, Motsch., and these, together with *umbrosa*, are certainly forms of *P. dispar*. Seeing how subject to variation *P. dispar* is in Europe, it is perhaps not matter for surprise that the species should also vary in Asia, and that the Asian forms and those of Europe be connected by intermediates.

142. *Leucoma salicis*, Linn.

Four specimens agreeing with the European form, only the wings appear to be more closely scaled, thus giving the insect a more silvery white but less glossy appearance.

143. *Belippa horrida*, Walk., Cat. Lep. Het., Suppl., ii., p. 509.

Only one specimen.

144. *Attacus cynthia*, Drury, App., ii., Cram., Pap. Exot., i., 62, pl. 39, fig. a.

Attacus pryeri, Butl., Proc. Zool. Soc., 1878, p. 387, n. 18; Ill. Typ. Lep. Het., pt. iii., p. 11, pl. xliii., fig. 5 (1879).

A. walkeri, Feld., Wien. Ent. Mon., vi., p. 34.

A large number of examples, which, from their splendid condition, appear to have been bred.

The specimens are for the most part of the Japanese form (*pryeri*, Butl.), but there are others which cannot be separated from *walkeri*, Feld. Neither of these forms appear to show specific differences from *cynthia*.

145. *Actias sinensis*, Walk., Cat. Lep. Het., vi., p. 1264 (1855).

One specimen.

146. *Actias selene*, Hübn., Verz. Schmett., 152, 1588.

Actias ningpoana, Feld.

Tropæa artemis, Brem., Etud. Entom. de Motschulsky, p. 64 (1852); Lep. Ost.-Sib., p. 44, tab. ii., fig. 6 ♂, fig. 7 ♀.

T. gnoma, Butl., Ann. & Mag. Nat. Hist. (4), xx., p. 480 (1877); Ill. Typ. Lep. Het., pt. ii., p. 17, pl. xxv., fig. 1 (1878).

Four examples, three of which agree with the form *ningpoana*, and the other with the type.

147. *Antheræa pernyi*, Guérin, Rev. et Mag., Zool., 1855—6, 297, pl. vi., fig. 1.

Antheræa hazina, Butl., Trans. Ent. Soc. Lond., 1881, p. 13.

One female specimen only.

- 147 a. *Saturnia pyretorum*, Boisduval MSS., Westw.,
Cab. Orient. Ent., 49, pl. 24, fig. 2.

One specimen bred by Pratt in March, 1888, from a pupa obtained at Kiukiang in 1887.

148. *Brahmæa undulata*, Brem., Schmett. Nordl.
China's, p. 16, pl. v., fig. 3.

Five specimens of this fine species.

149. *Clisiocampa neustria*, Linn.

Two specimens, male and female, identical with European examples.

150. *Odonestis læta*, Walk., Cat. Lep. Het., vi., 1416,
n. 6 (1855).

Three specimens, which appear to have been bred.

151. *Trabala vishnu*, Lef., Zool. Journ., iii., 207 (1827).

Var. *sulphurea*, Kollar, Kaschmir, Von Hugel, 171, 1.
Trabala basalis, Walk., Lep. Het., vii., 1785.

One specimen of the var. *sulphurea*.

The type has been recorded from Hongkong and Madras, and the variety from Silhet, Murree, and several places in N. India.

152. *Phassus sinensis*, Moore, Ann. & Mag. Nat. Hist.
(4), xx., 94 (1877).

One specimen in very imperfect condition.

153. *Thyatira trimaculata*, Brem., Bull. Acad. Sci. St.
Pet., iii., 570 (1861); Lep. Ost.-Sib., p. 47, tab. v.,
fig. 5.

One example.

154. *Acronycta rumicis*, Linn.

Two specimens darker than those from Europe, but agreeing in this respect with examples from the Corea and Japan.

155. *Moma (Noctua) orion*, Esp., 108, 4—7; Tr., v., 1, 54; Dup., vi., 85, 5; Frr. B., 22; Guén., i., 36.

Noctua aprilina, Wien. Verz., 70, 6; Fabr., Mant. Ins., ii., 172, 247; Hübn., Eur. Schmett. Noct., pl. 5, fig. 22.

Diphthera orion, Walk., Cat. Lep. Het., ix., 33.

One example agreeing exactly with specimens from Europe.

156. *Mythimna turca*, Linn.

Two examples.

157. *Mythimna placida*, Butl., Ann. & Mag. Nat. Hist. (5), i., 79 (1878); Ill. Typ. Lep. Het., pt. ii., p. 21, pl. xxviii., fig. 5 (1878).

One specimen.

158. *Mythimna (Leucania) singularis*, Butl., Ann. & Mag. Nat. Hist. (5), i., 80 (1878); Ill. Typ. Lep. Het., pt. ii., p. 22, pl. xxviii., fig. 11.

Mythimna formosana, Butl., P. Z. S., 1880. p. 673.

Two specimens.

159. *Leucania decisissima*, Walk., Cat. Lep. Het., Suppl., ii., 624 (1865).

Leucania salebrosa, Butl., Ann. & Mag. Nat. Hist. (5), i., 80 (1878); Ill. Typ. Lep. Het., pt. ii., p. 22, pl. xxviii., fig. 10.

L. rufistrigosa, Moore, P. Z. S., 1881, p. 337.

Appears to be a very variable species.

160. *Leucania extranea*, Guén., Noct., i., 77, 104.

A long and exceedingly variable series. Some of the specimens appear to be identical with *L. trifolii* and *L. scacharivora*, both of Butler, and from Chili.

161. *Leucania simplex*, n. s.

Primaries pale brown, with a reddish tinge, the median nervure is but little, if any, paler, and there is no shade below it; a curved series of minute black dots seated on the nervules towards outer margin, and a dark oblique and rather indistinct streak from the

apex to middle of wing are the only noticeable markings. Fringes rather darker. Secondaries fuscous, broadly pale along the anterior and inner margins; fringes pale brown. Head and thorax pale brown tinged with red; abdomen pale brown, shaded with fuscous. Under surface of primaries pale greyish brown, with lustrous reflections, and a small fuscous cloud on the disc; secondaries pale lustrous grey; all the wings have a series of small black points on their outer margins just before the fringes.

Expanse, 40 mm.

162. *Cloantha polyodon*, Clerck.

Cloantha perspicillaris, Linn.

C. orontii, Her.-Schäff., Schmett. Eur., ii., pl. 36, figs. 180, 181.

C. intermedia, Brem., Bull. de l'Acad., 1861, t. iii.; Lep. Ost.-Sib., p. 53, tab. v., fig. 13.

A fine series, showing much variation in depth of colour and intensity of marking.

163. *Mamestra thoracica*, Walk., Cat. Lep. Het., xv., p. 1684.

One example.

164. *Mamestra dolorosa*, Walk., Cat. Lep. Het., xxxii., p. 667.

Only one specimen.

165. *Perigea illecta*, Walk., Cat. Lep. Het., Suppl., ii., 684.

One example, and this appears very like one of the forms of *A. didyma*, Esp.

166. *Hadena funerea*, Hein., Schm. D., i., 828.

Xylophasia sodalis, Butl., Ann. & Mag. Nat. Hist. (5), i., p. 83, 1878; Ill. Typ. Lep. Het., ii., p. xxix., fig. 2.

Three specimens, agreeing with *H. funerea*, Hein., and also with some of the insects comprising a series in the National Collection, labelled *Xylophasia sodalis*, Butl.

167. *Caradrina cæca*, Oberth., Diagn. Lep. Ask., p. 14.

One example.

168. *Hermonassa cecilia*, Butl., Ann. & Mag. Nat. Hist. (5), i., 164 (1878); Ill. Typ. Lep. Het., pt. iii., p. 14, pl. xliv., fig. 9 (1879).

Three specimens.

169. *Agrotis ypsilon*, Rott., Naturf., xi., p. 141.

Agrotis suffusa, Hübn., 134.

This appears to be a very common insect at Kiukiang. The series received includes most of the forms occurring in Europe.

170. *Graphiphora dahlii*, Hübn.

Graphiphora canescens, Butl., Ann. & Mag. Nat. Hist. (5), i., 165 (1878); Ill. Typ. Lep. Het., pt. ii., p. 28, pl. xxx., fig. 1.

Several specimens showing considerable variation in tone of colour. Among them are examples exactly identical with *canescens*, Butl.

171. *Graphiphora brunnea*, Fabr.

A short series.

172. *Graphiphora pacifica*, Butl., Ann. & Mag. Nat. Hist. (5), i., 165 (1878); Ill. Typ. Lep. Het., pt. ii., p. 28, pl. xxx., fig. 2 (1879).

One specimen.

173. *Aplectoides caligenea*, Butl., Trans. Ent. Soc. Lond., 1881, p. 185, n. 66.

One example.

174. *Polydesma vulgaris*, Butl., P. Z. S., 1886, p. 381.

One example.

175. *Eurois exclusa*, n. s. (Pl. IX., fig. 9).

Male. Primaries greyish, with a tinge of blue along the inner margin, and an ochreous shade over the disc; a short line at the base, and one before the middle running from outer to inner margins, blackish, the interspace slightly darker than ground colour, an interrupted and much dentated blackish line commencing on the middle of costa and terminating on inner margin near the

blackish submarginal line; this last is edged externally with whitish, space between the two lines filled up with dark brown, and intersected from the costa to below median nerve by an angulated black line, a row of black dots, and a thin wavy black line along the outer margin; reniform stigma whitish, indistinctly outlined, from its external edge, which is bordered with black, a short black dash is projected in the direction of outer margin. Secondaries greyish brown, central line and outer margin darker. Fringes greyish, paler at their base. Head and thorax ashy grey, collar darker; abdomen greyish brown, darker on the last segments. Under surface of all the wings greyish brown, shaded with fuscous towards outer margins; discal spot and interrupted band-like central shade fuscous.

Expanse, 46 mm.

Two male specimens.

176. *Penicillaria geyeri*, Feld., Reise der Nov., t. cx.,
fig. 23.

Two examples, each differently coloured.

177, *Callopietria purpureofasciata*, Piller, t. 6, 2 (1783).

Callopietria pteridis, Fabr., Ent. Syst., 90 (1794).

C. exotica, Guen., Noct., ii., 294, 1097.

C. duplicans, Walk., Cat. Lep. Het., xii., p. 866, n. 14
(1857).

A variable series, among which are specimens exactly identical with examples from Europe and others which agree with *exotica*, Guen., and *duplicans*, Walk.

178. *Acontia bicolora*, n. s. (Pl. IX., figs. 7 ♂, 7 a ♀).

Male. Primaries: basal two-thirds canary-yellow, outer third reddish brown, with a broad lilacine fascia-like patch extending from the inner margin nearly to apex, parallel with outer margin; the boundary line separating the exterior portion from the basal is rather darker, and projects into the latter for a short distance just below the anterior margin. Fringes dark brown, with a patch of whitish at the apex. Secondaries dark brown, fringes whitish, intersected by a dark greyish line. Head and thorax canary-yellow; abdomen dark grey, segmental divisions paler. Under surface of all the wings fuscous, with a patch of yellow on the anterior margin of each wing near the apex, and an ill-defined yellow line

on the outer margin of primaries; fringes of primaries dark brown, chequered at the apex and near outer angle with whitish; of secondaries whitish, intersected by a line of dark brownish.

Female. Primaries dark reddish brown, with two patches of canary-yellow along the anterior margin, and some yellow scales on the inner margin near the base and just below the middle of outer margin, a broad lilacine fascia as in the male, fringes dark brown, with some yellow scales at the apex and near the outer angle. Secondaries dark brown; fringes yellow, intersected by a darker line. Head and thorax blackish, irrorated with yellow. Under surface as in male.

Expanse, ♂ 24 mm., ♀ 21 mm.

One female example only from Kiukiang; the description and figure of male are from a Japanese specimen.

179. *Hecatera fasciata*, n. s. (Pl. IX., fig. 8).

Female. Primaries ashy grey, with a broad dark central fascia margined with whitish, similar in shape to the same character in *H. serena*; outer margin dark. Secondaries smoky. Head, thorax, and abdomen grey. Under surface dusky, with a darker band-like shade traversing each wing near their outer margin. A dark discal spot on secondaries.

Expanse, 32 mm.

Only one example (female) received.

180. *Dianthecia compta*, Fabr., Mant., 169.

One example exactly like some European forms of this species.

181. *Plusia albostrigata*, Brem. & Grey, Beitr. zur Schmett. Fauna des Nordl. Ch., 18, 97.

Three specimens.

182. *Plusiodonta compressipalpis*, Guen., Noct., 359, 1200.

Only one example.

183. *Gonitis mesogona*, Walk., Cat. Lep. Het., xiii., p. 1002.

Three specimens.

184. *Gonitis albitibia*, Walk., Cat. Lep. Het., xiii., p. 1001.

One example.

185. *Amphipyra pyramidea*, Linn.

Amphipyra monolitha, Guen., Noct., ii., 414, 1279;
Walk., Cat. Lep. Het., xiii., p. 1018 (1857).

A. magna, Walk., Cat. Lep. Het., Suppl., iii., p. 868
(1865).

Var. *obscura*, Oberth., Etud. Entom., v., p. 85.

Two specimens only from Kiukiang, one of which is the var. *obscura* and the other *magna*, Walk.

In a long and variable series of this species, taken by myself in Japan, there are specimens which agree with *monolitha*, Guen. Others with *magna* and one or two examples with Oberthür's variety. These forms are connected one with the other and with *pyramidea* by intermediates.

186. *Amphipyra livida*, Fabr., Mant., 138.

Amphipyra corrina, Motsch., Bull. Soc. Mosc., xxxix.,
i., p. 194.

A good series, mostly in fine condition.

187. *Nænia contaminata*.

Graphiphora contaminata, Walk., Cat. Lep. Het.,
Suppl., iii., p. 710 (1865).

Several specimens.

188. *Mormo mucivirens*, Butl., Ann. & Mag. Nat. Hist.
(5), i., 289; Ill. Typ. Lep. Het., pt. ii., p. 37,
pl. xxxii., fig. 5.

Several specimens. The Kiukiang form of this species is something paler in colour, and is without the dark central shade on fore wings so conspicuously defined in Japanese specimens.

189. *Orthogonia sera*, Feld., Wien. Ent. Mon., vi., 38.

Orthogonia crispina, Butl., Ann. & Mag. Nat. Hist. (5),
i., 288 (1878); Ill. Typ. Lep. Het., pt. ii., p. 36,
pl. xxxii., fig. 6.

A long and variable series, among which are examples of *crispina*, Butl., with "paler whity-brown tint and darker central band" on primaries.

190. *Dichonia bipunctata*, Motsch., Etud. Ent., 1860,
p. 32.

Appears to be fairly common at Kiukiang.

191. *Toxocampa lilacina*, Butl., Ann. & Mag. Nat. Hist.
(5), i., 289 (1878); Ill. Typ. Lep. Het., ii., p. 37,
pl. xxxii., fig. 8.

Toxocampa recta, Brem.

Four or five specimens. This is probably only a form
of *T. vicinæ*, Hübn.

192. *Calpe excavata*, Butl., Ann. & Mag. Nat. Hist. (5),
i., 202; Ill. Typ. Lep. Het., pt. ii., p. 35, pl. xxxii.,
fig. 1.

One specimen.

193. *Lacera procellosa*, Butl., Ann. & Mag. Nat. Hist.
(5), iv., 369 (1879).

One example.

194. *Sypna achatina*, Butl., Cist. Ent., ii., p. 245
(1877); Ill. Typ. Lep. Het., pl. xlvii., fig. 7.

Two examples.

195. *Sypna astrigera*, Butl., Cist. Ent. iii., p. 135.

One specimen only.

196. *Sypna distincta*, n. s. (Pl. IX., fig. 10).

Allied to *picta*, from which, however, it may be distinguished by its pale brown ground colour, and the very different markings on primaries. These consist of a short white basal line, double on the costa, but broken up into dots and turned in to the base below the median nervure; beyond this an almost straight line formed of white dots and irregular-shaped marks, reaching from anterior to inner margins, and at about the middle of the wing is another line of larger white spots or marks; this last starts from the costa, almost immediately turns in the direction of outer margin, then towards inner margin, and finally, after curving inwards again, falls straight on the inner margin directly under its point of origin. A central line of dark brown from the inner margin, but not reaching the costa, and beyond on the outer third is a broad

stripe of dark brown, intersected by a wavy line of the ground colour. Reniform stigma represented by a large round white spot, preceded by three and followed by two smaller ones. Orbicular white dot-like, and outlined with dark brown. A row of white dots edged internally with blackish on the hind margin. Secondaries paler. A central wavy and angulated line from middle of anterior margin, terminating in a small white dash at the anal angle; two ill-defined dark lines parallel with hind margin, and a series of white linear dots, ringed with dark brown at the base of the pale brown fringes. Under surface pale grey; apices, basal half of primaries, and whole of secondaries irrorated with fuscous. Outer third of primaries, except at apex and anal angle, fuscous; the transverse discal lines of the same shade. Secondaries with a pale central space outlined with fuscous, and the ill-defined lines and hind marginal band also fuscous. Head and thorax colour of fore wings; abdomen colour of hind wings, but with darker dorsal tufts.

Expanse, 54 mm.

Ten examples of this species were received, all of which are males. There are some slight differences in the size, shape, and intensity of the white markings, but on the whole the species appears to be fairly constant.

197. *Ophideres tyrannus*, Guen., Noct., iii., 110, 1476.

Three specimens, two of which have olive-brown and the other reddish-brown fore wings.

198. *Ophideres fullonica*, Linn.

Two specimens with brown fore wings, tinged and spotted with green, but without white markings.

199. *Ophideres salamina*, Cram., Pap. Exot., ii., 117, pl. 174, fig. A.

Only one example.

200. *Lagoptera dotata*, Fabr.

Appears to be common at Kiukiang.

201. *Lagoptera elegans*, Van der Hoven, Lep. Nov., pl. v., fig. 6, a, b.

A long and most variable series of this interesting species.

202. *Catocala esther*, Butl., Cist. Ent., ii., p. 243 (1877); Ill. Typ. Lep. Het., pt. ii., p. 40, pl. xxxiii., fig. 9 (1878).

Catocala numægeni, Staud.

Three specimens differing somewhat in colour.

203. *Catocala volcanica*, Butl., Cist. Ent., ii., p. 244, (1877); Ill. Typ. Lep. Het., pt. ii., p. 40, pl. xxxiii., fig. 10 (1878).

Five examples.

204. *Chrysorithrum amatum* (Brem., Ménétriés, Cat. Lep. Mus. Petrop., iii., pl. xvii., fig. 4).

One specimen.

205. *Patula macrops*, Linn.

Patula boopis, Guen., Noct., iii., 178, 1569.

An example of each sex.

206. *Nyctipao crepuscularis*, Linn.

Three examples.

207. *Spiramia retorta*, ♀, Linn. Mus. Lud. Ulr., ii.; Cram., Pap. Exot., iii., 146, pl. 274, fig. A.

Spiramia retorta, ♂, Cram., Pap. Exot., ii., 29, pl. 116, fig. F; *suffumosa*, Guen., Noct., iii., 195, 1590.

S. spiralis, Fabr., Sp. Ins., ii., 211, 10.

S. japonica, Guen., Noct., iii., 195, 1591.

S. jinchuena, Butl., Ann. & Mag. Nat. Hist. (5), xi., p. 115, n. 28.

S. inæqualis, Butl., l. c., n. 29.

A fine series, comprising all the named forms enumerated above.

208. *Spiramia martha*, Butl., Ann. & Mag. Nat. Hist. (5), i., p. 292 (1878); Ill. Typ. Lep. Het., pt. ii., p. 41, pl. xxxiv., fig. 3.

Spiramia agrotæ, Butl., Trans. Ent. Soc. Lond., 1881, p. 197, n. 86.

Several specimens, including both named forms of this insect, and the intermediates connecting one with the other.

Mr. Butler (*l.c.*), in his comparative description of *Spiramia agrotæ*, says that it is paler, and has less pronounced markings than *S. martha*; also that the first and second lines are nearer together, and the third hardly represented. In the series from Kiukiang are examples much darker, and with more strongly-defined markings than type of *S. martha*, whilst other specimens are much less clearly marked than the type of *S. agrotæ*.

Altogether this appears to be a most variable insect as regards colour and ornamentation of both the upper and under surfaces.

209. *Calliodes rectifasciata*, Henety.

Spiramia interlineata, Butl., Ann. & Mag. Nat. Hist. (5), i., 291 (1878); Ill. Typ. Lep. Het., ii., p. 41, pl. xxxiv., fig. 2.

A variable series.

210. *Cocytodes modesta*, Van der Hoven, Lep. Nouv., pl. vii., fig. 8.

Four examples.

211. *Ophiusa falcata*, Moore, Descr. Ind. Lep. Atk., ii., p. 171, pl. vi., fig. 14.

A fine series.

212. *Ophiusa algira*, Linn.

Ophiusa stuposa, Fabr., Ent. Syst., iii., 2, 42, 112.

One example.

213. *Ophiusa arctotænia*, Guen., Noct., iii., 272, 1711; Walk., Cat. Lep. Het., xiv., p. 1481.

Five specimens showing some difference in width of central fascia on fore wings.

214. *Grammodes mygdon*, Cram., Pap. Exot., ii., pl. 156, fig. G.

One fine example.

215. *Remigia archesia*, Cram., Pap. Exot., iii., 145,
pl. 273, figs. F, G.

Remigia virbia, Cram., l. c., fig. H.

A fine series, exhibiting some interesting variation.

216. *Remigia annetta*, Butl., Ann. & Mag. Nat. Hist. (5),
i., 293 (1878) ; Ill. Typ. Lep. Het., pt. ii., p. 43,
pl. xxxiv., fig. 7.

Four examples.

217. *Sonagara vialis*, Moore, P. Z. S., 1883, p. 27, pl. vi.,
fig. 9.

One specimen.

218. *Ophiodes triphænoïdes*, Walk., Cat. Lep. Het., xiv.,
1358 (1858).

Ophiodes cuprea, Moore, P. Z. S., 1867, p. 74.

Eight specimens, differing somewhat in colour and strength of marking.

219. *Ophiodes tirrhæa*, Cram., Pap. Exot., ii., 15,
pl. 172, fig. E.

Ophiodes resta, Esp., Schmett., iv., pl. 141, fig. 1.

O. olivacea, Vill., Ent. Linn., 334, pl. 5.

O. auricularis, Hübn., Noct., pl. 66, fig. 321.

O. hottentota, Guen., Noct., iii., 229, 1635.

O. separans, Walk., Cat. Lep. Het., xiv., 1357.

A long series. Variable in shade of fore wing, ground colour, and in the width of black band on hind wing.

220. *Serrodus campana*, Guen., Noct., iii., 252, 1673.

Five specimens, exhibiting much variation in the character of basal markings on fore wing.

221. *Ophismia gravata*, Guen., Noct., iii., 237, 1648.

One male specimen.

222. *Potamophora manlia*, Cram., Pap. Exot., i., 144,
pl. 92, fig. a.

Several specimens, varying considerably in the intensity of the markings on fore wings. In one example only the reniform and orbicular stigmata are visible, and these are but faintly indicated.

223. *Hulodes caranea*, Cram., Pap. Exot., iii., 140,
pl. 269, figs. e, f.

Only one example.

224. *Urapteryx delectans*, Butl., Ill. Typ. Lep. Het.,
pt. ii., p. 45, pl. xxxv., fig. 2 (1878).

One example of this species, which appears to be closely allied to *U. pratoraria*, Feld.

225. *Odontoptera mandarinata*, n. s. (Pl. IX., fig. 13).

Female. All wings dingy green (probably faded), each with a large dark brown discal spot surrounded with whitish, a narrow dark line on their outer margin; a few dark scales scattered over the upper third of secondaries. Fringes greyish brown, darker at the extremities of nervules. Under surface fuscous, with a few yellowish scales along anterior margin of primaries.

Expanse, 43 mm.

Except that the outer angle emargination of secondaries is slightly different, the female example from Kinkiang, described above, is identical with an unnamed male specimen from N. India in the National Collection at South Kensington. The difference referred to may be sexual. The species is also closely allied to *O. chalybeata*, Moore, which, however, has distinct transverse bands on the dark yellow under surface.

226. *Geometra viridiluteata*, Walk., Cat. Lep. Het., xxii.,
p. 515 (1861).

One male example.

227. *Thalera strigata*, Muel., Faun., Ins. Fr., p. 51
(1764).

Thalera (Hemithea) thymiaria, Guen., Phal., i., 384.

One female specimen.

228. *Thalera crenulata*, Butl., Ann. & Mag. Nat. Hist. (5), i., 399 (1878); Ill. Typ. Lep. Het., pt. iii., p. 37, pl. l., fig. 2.

One specimen.

229. *Ephyra grata*, Butl., Ann. & Mag. Nat. Hist. 1879, p. 438.

Two specimens.

230. *Bizia æxaria*, Walk., Cat. Lep. Het., xx., 261 (1860); Butl., Ill. Typ. Lep. Het., iii., p. 31, pl. xlviii., fig. 5 (1879).

Eudropia mibuaria, Felder, Reise der Nov., Lep., v., t. cxxiii., fig. 31 (1875).

Three specimens, differing considerably in size.

231. *Elphos latiferaria*, Walk., Lep. Het., xxi., p. 445 (1860); Butl., Ill. Typ. Lep. Het., pt. iii., pl. xlix., fig. 11.

Three specimens, varying somewhat in size, colour, and intensity of marking.

232. *Boarmia picata*, Butl., Trans. Ent. Soc. Lond., 1881, p. 408, n. 104.

Five specimens. This appears to be a form of *B. repandata*, Linn., of which species I have seen British examples that agree exactly with these from Kiukiang.

233. *Boarmia consortaria*, Fabr.

Boarmia conferenda, Butl., Ann. & Mag. Nat. Hist. (5), i., 395 (1878).

Three specimens.

234. *Boarmia grisea*, Butl., Ann. & Mag. Nat. Hist. (5), i., 396 (1878); Ill. Typ. Lep. Het., pt. iii., p. 33, pl. xlix., fig. 2.

One male example.

235. *Boarmia ocellata*, n. s. (Pl. IX., fig. 11).

Male. All the wings whitish, sprinkled with brown and ochreous scales, clouded with fuscous at the tips and angles, and with a series of black points on edge of outer margins. Discal rings blackish, conspicuous. Primaries: anterior margin narrowly edged with dark brown, and with three dark brown marks, from which emanate three transverse angulated lines; only one, however—that beyond the middle—is distinctly traceable; submarginal line pale. Secondaries: central line blackish, serrated, and curved; submarginal line ill-defined, represented at the extremities by a darkish shade edged externally with whitish. Fringes greyish. Head, thorax, and abdomen colour of wings. Antennæ deeply pectinated almost to their tips. Under surface whitish, with large black discal spots, and broad black hind marginal bands interrupted in the middle.

Female. Colour and markings as in male. Antennæ slightly serrated.

Expanse, ♂ 57—60 mm., ♀ 57 mm.

Very nearly allied to *Boarmia selenaria*, Hübn.; in the male of that species, however, the antennæ are not pectinated, but slightly setose only along their outer edge, and the female has filiform antennæ: therefore the two species are readily separated by these characters alone without reference to the wing-ornamentation, which, though much alike in the two species, present differences, such as the conspicuous discal rings above and spots below of *B. ocellata*. These, together with the black hind marginal band on under surface, at once distinguish this species from *B. selenaria*, or any other known Boarmid.

Three examples (one male, two females).

236. *Stenotrachelys cinerea*, Butl., Trans. Ent. Soc.,
Lond., 1881, 409.

Two specimens.

237. *Buzura abraxata*, n. s. (Pl. IX., fig. 14).

Female. Primaries white, with some yellow and brownish markings at the base, the most distinct of which are a yellow curved line from costa to inner margin, edged internally as far as the median nervure and externally to the submedian nervure with brownish; submarginal line yellow, edged externally with brownish.

and bordered on each side with fuscous. There are several fuscous spots, including a large central one, scattered over the disc, and a band of the same colour tapering towards the inner angle traverses the outer margin. Secondaries white, with a large central fuscous spot and some smaller ones on all the margins; a yellow line, edged with brownish and bordered with fuscous, runs from anal angle parallel with outer margin as far as the third median nervule. Antennæ brown, slightly serrated. Head and pectus yellowish, collar white, tipped with yellowish brown. Thorax white, ornamented with yellow and brownish. Abdomen white, tinged with fuscous dorsally; tufts yellowish. Fringes grey, partly chequered with white. Under surface: colour, and markings very similar to those of the upper side, but the central spots are yellowish brown.

Expanse, 78 mm.

238. *Pachyodes arenaria*, n. s. (Pl. IX., fig. 12).

Female. All the wings whitish. Primaries with some fuscous and brownish scales, sparingly sprinkled over the disc, more thickly on the costa and towards outer margin, and forming a dark patch on the anterior margin before the apex; before the middle is a brownish curved transverse line, preceded by a small oval mark and followed by a much larger one, both outlined in dark brown, and filled up with paler; beyond the middle a curved dark brown line from the costa appears to terminate at the second median nervule, but may be faintly traced from this point curving in the opposite direction to the inner margin. Secondaries whitish, sprinkled with pale brownish scales; submarginal line pale and ill-defined. Under side whitish. Primaries with a round spot above, a short bar near the base succeeded by a large oval spot, and a narrow curved fascia, all dark brown in colour, and, excepting the short bar, are reproduced on the secondaries. Head and collar brownish, thorax and abdomen whitish.

Expanse, 59 mm.

239. *Rhypparia jaguaria*, Guen., Phal., ii., 198, 1246.

Several fine examples. They are paler and larger than specimens from Japan.

240. *Abraxas sylvata*, Scop., Ent. Carn., p. 220 (1763).

Abraxas ulmata, Fabr., Syst. Ent., 632.

A. miranda, Butl., Ann. & Mag. Nat. Hist. (5), i., p. 441 (1878); Ill. Typ. Lep. Het., pt. iii., p. 48, pl. lii., fig. 12.

An extensive series, including specimens exactly identical with *miranda*, Butl., and typical examples of *sylvata*, with aberrations of the latter form leading up to *miranda*.

241. *Abraxas martaria*, Guen., Phal., ii., 205, 1258.

Three specimens.

242. *Abraxas junctilineata*, Walk., Cat. Lep. Het., xxiv., p. 1123, n. 18 (1862); Butl., Ill. Typ. Lep. Het., pt. ii., p. 53, pl. xxxvii., fig. 5 (1878).

One example, agreeing exactly with specimens from Japan.

243. *Abraxas amplificata*, Walk., Cat. Lep. Het., xxiv., p. 1124 (1862).

Four specimens, varying in size.

243a. *Abraxas interruptaria*, Feld., Wien. Ent. Mon., 1862, p. 39; Reise der Nov., pl. cxxix., fig. 29.

Varies in the size and intensity of black markings; in one example these are confluent, the white ground colour forming six spots on the primaries, and on secondaries is shown as a spot and fascia at the base, a central and two submarginal dashes.

244. *Panæthia hemionata*, Guen., Phal., ii., 208, 1267.

Only one example.

245. *Obeida vagipardata*, Walk., Cat. Lep. Het., xxiv., p. 1139 (1862).

Appears to be common at Kiukiang. The specimens differ greatly in the size of black spots; especially is this the case on the secondaries, where the spots are often confluent, and form wide bands.

246. *Aspilates mundataria*, Cram., Pap. Exot., 400, H.

Aspilates tonghata, Feld., Reise der Nov., t. cxxix., fig. 12.

One example.

247. *Percnia foraria*, Guen., Phal., ii., 217, 1280.

A fine series.

248. *Acidalia strigilaria*, Hübn.

Acidalia vagata, Walk., Cat. Lep. Het., xxiii., 762.

Four specimens, differing from European examples only in colour. The Kiukiang form is *vagata*, Walk., but is pale brown instead of grey.

249. *Acidalia indicataria*.

Argyris indicataria, Walk., Cat. Lep. Het., xxiii., p. 809 (1861); Butl., Ill. Typ. Lep. Het., iii., p. 43, pl. li., fig. 8 (1879).

Only one example. This insect appears to have nothing whatever to do with the genus *Argyris*, Walk.

250. *Asthena superior*, Butl., Ann. & Mag. Nat. Hist. (5), i., p. 400 (1878); Ill. Typ. Lep. Het., iii., p. 39, pl. l., fig. 9 (1879).

Three specimens.

251. *Timandra amataria*, Linn.

Timandra comptaria, Walk., Cat. Lep. Het., xxvi., 1615 (1862); Butl., Ill. Typ. Lep. Het., pt. iii., p. 41, pl. li., fig. 2.

252. *Macaria zachera*, Butl. Ann. & Mag. Nat. Hist. (5), i., p. 405 (1878); Ill. Typ. Lep. Het., iii., p. 45, pl. lii., fig. 2 (1879).

Several specimens.

253. *Macaria sinicaria*, Walk., Cat. Lep. Het., xxvi.

Macaria proditaria, Brem., Lep. Ost.-Sib., p. 81, t. vii., fig. 7 (1864).

M. maligna, Butl., Ann. & Mag. Nat. Hist. (5), i., 405 (1878); Ill. Typ. Lep. Het., iii., 45, pl. lii., fig. 3 (1879).

Four specimens, differing in size.

254. *Carige duplicaria*, Walk., Cat. Lep. Het., xxvi.,
1632 (1862).

Macaria nigrontaria, Brem., Lep. Ost.-Sib., p. 80,
t. vii., fig. 6 (1864).

One example.

255. *Melanippe procellata*, Hübner.

Melanippe inquinata, Butl., Ann. & Mag. Nat. Hist.
(5), i., p. 448 (1878); Ill. Typ. Lep. Het., pt. iii.,
p. 54, pl. liv., fig. 9.

I have but one specimen from Kiukiang, and this agrees exactly with Butler's figure of *M. inquinata*. Among a most variable series of *M. procellata*, which I obtained in Japan, are specimens identical with that from Kiukiang and others in no way different from European forms of the species, whilst of the remainder several are exceedingly dark in coloration.

256. *Melanippe* (?) *undulata*, n. s. (Pl. IX., fig. 15).

Male. Primaries with a black discal spot surrounded with whitish; basal patch, central fascia, and hind marginal band black, separated from each other by pure white angulated lines, and intersected by less distinct wavy whitish lines. A series of white spots, of which that at the apex is the largest along the outer margin. Secondaries black with whitish spots; angulated and wavy whitish lines as on primaries. Under surface of all wings similar to above, but with broader lines of white. Head, thorax, and abdomen black, the latter with whitish rings.

Expanse, 35 mm.

Only one example of each sex.

257. *Micronia pontiata*, Guen., Phal., ii., 29, 938;
Walk., Cat. Lep. Het., xxiii., 819.

One example.

258. *Cidaria mactata*, Feld., Reise der Nov., t. cxxxii.,
fig. 40.

Several specimens, varying in size.

EXPLANATION OF PLATES VII., VIII., & IX.

PLATE VII.

- FIG. 1. *Papilio elwesi*: 1a, neuration of hind wing.
 2. ,, *sarpedon*, Linn., var.
 3. *Lycæna moorei*.
 4. *Thecla pratti*.
 5. *Sciapteron chinense*.
 6. *Aracotia hyalina*.
 7. *Hypothyris aperta*.

PLATE VIII.

1. *Athyma fortuna*, ♂; 1a, *A. fortuna*, ♀.
 2. *Mycalesis regalis*, ♂; 2a, *M. regalis*. ♀.
 3. *Lethe naias*.
 4. ,, *butleri*.
 5, 5a. *Melanargia halimede* var. *meridionalis*, Feld.

PLATE IX.

1. *Syntomis pascus*.
 2. ,, *torquatus*.
 3. ,, *pratti*.
 4. *Hypercompa principalis* var. *regalis*.
 5. *Digama abietis*.
 6. *Bizone phædra*.
 7. *Acontia bicolora*, ♂; 7a, *A. bicolora*. ♀.
 8. *Hecatera fasciata*.
 9. *Eurois exclusa*.
 10. *Sypna distincta*.
 11. *Boarmia ocellata*.
 12. *Pachyodes arenaria*.
 13. *Odontoptera mandarinata*.
 14. *Buzura abraxata*.
 15. *Melanippe*? *undulata*.